

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A semiconductor laser device comprising:

an active layer;

a first cladding layer formed on a main surface of the active layer, the first cladding layer being doped with a first impurity to have a dopant concentration higher than $5 \times 10^{17} \text{ cm}^{-3}$ ~~$4 \times 10^{17} \text{ cm}^{-3}$~~ ; and

a second cladding layer formed on a portion of a main surface of the first cladding layer, the second cladding layer being doped with a second impurity different from the first impurity, wherein the first cladding layer has the same conductivity type as that of the second cladding layer, and

the first cladding layer has a resistivity higher than that of the second cladding layer.
- 2-3. (Canceled)
4. (Previously Presented) The semiconductor laser device of claim 1, wherein each of the first and second cladding layers is made of a compound semiconductor containing phosphorus,

the first impurity is magnesium, and

the second impurity is zinc.

5. (Previously Presented) The semiconductor laser device of claim 1, wherein a concentration of the first impurity in the first cladding layer is not more than $1 \times 10^{18} \text{ cm}^{-3}$.

6. (Previously Presented) The semiconductor laser device of claim 1, wherein the first cladding layer also contains a third impurity.

7. (Previously Presented) A semiconductor laser device comprising:
an active layer;
a first cladding layer formed on the active layer, the first cladding layer being doped with a first impurity; and
a second cladding layer formed on the first cladding layer, the second cladding layer being doped with a second impurity different from the first impurity,
wherein the first cladding layer has the same conductivity type as that of the second cladding layer,
the first cladding layer has a resistivity higher than that of the second cladding layer,
the first cladding layer also contains a third impurity,
each of the first and second cladding layers is made of a compound semiconductor containing phosphorus,
the first impurity is magnesium, and
each of the second and third impurities is zinc.

8. (Previously Presented) A semiconductor laser device comprising:
an active layer;

a first cladding layer formed on the active layer, the first cladding layer being doped with a first impurity; and

a second cladding layer formed on the first cladding layer, the second cladding layer being doped with a second impurity different from the first impurity,

wherein the first cladding layer has the same conductivity type as that of the second cladding layer,

the first cladding layer has a resistivity higher than that of the second cladding layer,

the first cladding layer also contains a third impurity,

each of the first and second cladding layers is made of a compound semiconductor containing phosphorus,

the first impurity is magnesium,

each of the second and third impurities is zinc, and

a total concentration of the first and third impurities in the first cladding layer is not less than $1 \times 10^{18} \text{ cm}^{-3}$ and not more than $5 \times 10^{18} \text{ cm}^{-3}$.

9. (Previously Presented) The semiconductor laser device of claim 1, wherein each of the first and second cladding layers is made of a compound semiconductor containing arsenic,

the first impurity is carbon, and

the second impurity is zinc.

10. (Previously Presented) The semiconductor laser device of claim 1, wherein the second cladding layer is formed into a ridge-shaped configuration on the first cladding layer.

11. (Previously Presented) The semiconductor laser device of claim 1, wherein the second cladding layer has a lower portion thereof formed into a stripe configuration.

12. (Currently amended) A method for fabricating a semiconductor laser device, the method comprising the steps of:

forming an active layer on a substrate;

forming a first cladding layer on a main surface of the active layer, while doping the first cladding layer with a first impurity to have a dopant concentration higher than $5 \times 10^{17} \text{ cm}^{-3}$ ~~4 × 10¹⁷ cm⁻³~~; and

forming a second cladding layer on a portion of a main surface of the first cladding layer, while doping the second cladding layer with a second impurity different from the first impurity, wherein

the first cladding layer has the same conductivity type as that of the second cladding layer and has a resistivity higher than that of the second cladding layer.

13. (Canceled)

14. (Previously Presented) The method of claim 12, wherein each of the first and second cladding layers is made of a compound semiconductor containing phosphorus,

the first impurity is magnesium, and

the second impurity is zinc.

15. (Previously Presented) The method of claim 12, wherein the step of forming the first cladding layer includes doping the first cladding layer with a third impurity in addition to the first impurity.

16. (Previously Presented) A method for fabricating a semiconductor laser device, the method comprising the steps of:

forming an active layer on a substrate;

forming a first cladding layer on the active layer, while doping the first cladding layer with a first impurity; and

forming a second cladding layer on the first cladding layer, while doping the second cladding layer with a second impurity different from the first impurity, wherein

the first cladding layer has the same conductivity type as that of the second cladding layer and has a resistivity higher than that of the second cladding layer,

each of the first and second cladding layers is made of a compound semiconductor containing phosphorus,

the first impurity is magnesium, and

each of the second and third impurities is zinc.